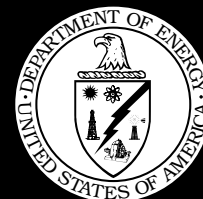


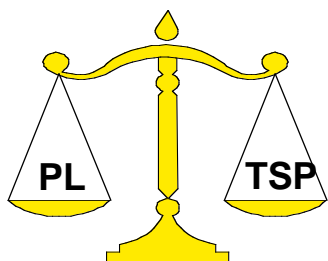
The Standards

Forum

News on the DOE Technical Standards Program



Volume 4, Number 2 - September 1996



Implementation of the National Technology Transfer and Advancement Act of 1995 (Public Law 104-113)

Work continues within the Technical Standards Program Office (TSPO) supporting the implementation of Public Law (PL) 104-113. Activities in progress include the following:

1. The TSPO is developing revisions to the Technical Standards Program Procedures (TSPPs) to reference PL 104-113 and strengthen the project screening process (TSPP-2) to promote development of voluntary standards in lieu of DOE technical standards. The proposed TSPP revisions will be submitted to the Technical Standards Managers' Committee (TSMC) for review before the next meeting (scheduled for October 29-30, 1996, in Alexandria, Virginia). At that meeting, TSMC approval of the proposed TSPP revisions will be requested.
2. The proposed revision to DOE Order 1300.2A (i.e., DOE O 252.1) and its implementation guide (G 252.1-1) that were discussed at the April 1996 TSMC meeting have been updated to include appropriate references to PL 104-113 and the pending revision to OMB Circular A-119. The new order and guide have been submitted to Directives System personnel, and both documents are being formally coordinated.
3. Discussions are being planned with the Department Standards Committee and Directives Systems management to advise them of the new public law and its impact on standards management activities within DOE.

These actions, and others being taken or to be taken by DOE, will be described in a memorandum from Dr. Tara O'Toole, Assistant Secretary for Environment, Safety and Health, EH-1. The EH-1 memorandum has been prepared and will be released in the near future.

If you would like to receive additional information on PL 104-113, please contact the TSPO.



Analysis Underway on International OHSMS Standards

(The following is a summation of an article appearing in the Summer 1996 issue of the *ANSI Reporter*. Used with permission.)

Preliminary results of a workshop conducted by ANSI (May 7-8, 1996; Rosemont, Illinois) to explore the need for an international occupational health and safety management systems (OHSMS) standard have revealed that an overwhelming majority of stakeholders feel that such a standard should not be developed at all, or at least not at this time. Stakeholders participating in the workshop represented a cross-section of business and industry, government, labor, standards developing organizations, and the insurance industry.

The results of the workshop, and a questionnaire developed to obtain additional feedback from participants and from stakeholders who were not able to attend, are currently being analyzed by a task group of ANSI's International Advisory Committee (IAC). The IAC, a committee of the ANSI Board, will use this to formulate a U.S. perspective to present at an International Organization for Standardization (ISO) workshop on this subject in Geneva Switzerland, on September 5-6, 1996. As the U.S. member body of ISO, ANSI will represent the U.S. at the international workshop.

More than 200 representatives from the private and public sectors participated in the OHSMS workshop. The first day of the workshop featured an open session where speakers from each of the five primary stakeholder groups presented their views. On the second day, speakers and participants first broke up into "stakeholder breakout groups" to discuss issues from their sector's perspective and then split up

(Continued on Page 4)

INSIDE THIS ISSUE

| | | | |
|---------------------------|---|-------------------------|----|
| From the Manager | 2 | News Briefs | 5 |
| Questions & Answers | 2 | Standards Actions | 7 |
| TSM Spotlight | 3 | Meetings | 11 |
| Standards On-Line | 4 | Be An Early Bird | 12 |

a note from the Manager...

DOE Technical Standards Program

With the slowdown in travel has come a slowdown in communications among DOE Technical Standards Managers (TSMs). We hope to get back on track with proactive communications with the Technical Standards Managers' Committee (TSMC) meeting to be held October 29-30, 1996, in Alexandria, Virginia (i.e., Washington, D.C.). In the meantime, all TSMs should be active on the Technical Standards Program (TSP) current issues: (1) the revised drafts of the Technical Standard Order and Guide have been distributed through the Directives System - review these and provide comments to me; (2) Public Law 104-113 codifies OMB circular A-119, which is being revised and, thus, necessitates the revision of our Technical Standards Program Procedures - you should review the changes we propose and prepare input for the meeting; (3) use of voluntary standards pro-

duced by non-government standards bodies is more important than ever - you and your management should focus on carefully screening any proposed technical standards development efforts and ensuring that their development can be justified to the Office of Management and Budget; (4) the TSP is actively soliciting the participation of technical groups as topical committees under the recognition of the TSP (e.g., Metrology) - encourage such groups to come in under the TSP umbrella; (5) the TSP is forging more structured and readily usable links to standards development organizations (SDOs) such as ASME and ASTM - learn how to use these links and how to provide your preparing activities with links to the SDOs so that voluntary standards can be their first consideration; (6) electronic communication through the Internet, our Home Page, and Email and LAN links can be very effectively applied for the TSP - give us your ideas; and (7) the participation of each TSM is critical to our success as a crosscutting, outcome-oriented program - participate or have an active replacement designated in your stead.

— Rick Serbu



Answers to Frequently Asked Questions

Question: I noticed recently that there are two documents being developed that will be titled as DOE-SPECs. What is a DOE-SPEC?

Answer: A DOE-SPEC (i.e., Specification) is one of four types of DOE technical standards used within DOE. The other documents are: Standards, Handbooks, and Technical Standards Lists. A DOE Specification is patterned after the DoD Specification, a document prepared specifically to (1) support repetitive acquisitions of products, items or services, (2) clearly describe essential technical requirements for purchasing, and (3) provide receipt inspection criteria to determine that the items covered by the specification meet the need. The use of DOE Specifications, if no other specifications can meet the DOE need, have the potential of cost savings in transitions requiring repetitive purchases. Because of this potential, the use of these documents is expected to increase as the Technical Standards Program (TSP) becomes more visible throughout the DOE complex.

Question: How can I best obtain a "current" listing of DOE technical standards?

Answer: Look at the copy of DOE-TSL-1, "*Department of Energy Standards Index*," on the TSP Home Page under the heading "Information Searches" and then supplement

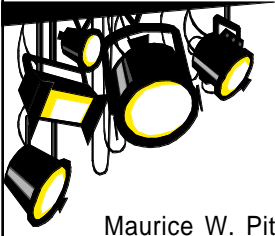
that list with the list under the heading "Recently Approved DOE Technical Standards." This second list is updated each time a new technical standard is approved, and generally predates hard copy distribution by several days. Also, if you are using the Internet on a regular basis, that list is the best place to get an idea of the types of new documents that are available.

Question: What is the process for getting a new DOE technical standard developed?

Answer: First, make a list of reasons for needing such a document. Then, discuss that list with your line supervisor. Once the two of you agree on the need, notify your Technical Standards Manager (TSM), who will assist you with the project registration process. You can find the name of your TSM in the TSP Home Page under the heading "Information Searches," and then select "Technical Standards Managers List." If you do not have access to the Internet, or have some questions about how to start the process, call one of the members of the TSPO listed elsewhere in this newsletter. Further guidance is contained in the TSP procedure TSPP-2, "Establishing the Need for a Technical Standard." Copies of the procedures are available from the TSPO.

REMEMBER - if the need for a technical standard exists, the law (i.e., PL 104-113) requires that preference be given to the use of or revision to an existing non-government (voluntary) standard over the development of a new non-government standard. Where these options cannot be satisfied (either due to the absence of an appropriate standard, the lack of interest on the part of voluntary standards organizations, or the inability of a voluntary standards organization to produce a standard on a schedule consistent with Department priorities), development of a DOE technical standard can then be pursued.

Technical Standards Manager Spotlight



Maurice W. Pitt Technical Standards Manager Office of Defense Programs

Maurice W. Pitt has been the Technical Standards Manager for the DOE Office of Defense Programs since 1993. His responsibilities include the management of technical standards development and implementation, including the implementation of DOE orders, rules, industry standards, design codes, and other requirements applicable to the design, construction and operation of DOE defense nuclear facilities.

Maurice's work at DOE has included a number of multi-disciplinary assignments for three different DOE offices. His DOE career began in 1984 with the Office of Fossil Energy (FE) where he managed the development of fuel cell systems and developed detailed engineering analyses to determine the technical feasibility of these systems. While at FE, he also formulated and directed a research and development program to develop cost-effective technologies for clean coal combustion and hot gas streams for stationary power and electric utility applications. Maurice moved to the Office of New Production Reactors in 1990. Here he worked for the heavy water reactor design program in the development of site geologic, seismic, and geotechnical investigations as input to facility structural design and safety analysis.

Maurice's engineering career began with the Westinghouse Electric Corporation in Baltimore in 1975, where he was involved in the thermal design of airborne electronic systems and aircraft modifications. His early engineering days also included positions at three other high-tech firms in the Washington, DC, area, involving various activities in the environmental and project management disciplines.

"I look at standards as principles of function and operation that, from my own experience, are too often taken for granted," Maurice told *The Standards Forum*. He noticed a significant contrast in the standards attitudes at DOE and those in the aircraft industry. "Early in my professional career, I was involved in the application of military specifications and military standards to the design and modification of aircraft electronic systems. In that business, there is no option. As a designer you are compelled to conform to the standards as required by contract. Consequently, I was surprised that the prin-

ciples of knowing what your standards are and how to comply with them seemed to be problematic at DOE." Maurice's years at DOE have been seasoned with valuable insight, and he now says, "I am better able now to appreciate the unique circumstances that confront DOE."

Maurice's observation is that the problem with standards at DOE derives from inadequate documentation of the standards that are inherent in the design and operation of DOE facilities. "I have often asked myself how I would approach the identification of standards required for safe operation," Maurice says. "If as-built drawings are not available, then standards identification could require walking-down facilities and, in the worst case, some degree of design basis reconstitution. A review of procedures would be needed to address operational requirements.

Such information would then be compared to applicable and appropriate standards in the technical community. Where there was no comparable standard, the requirement in question could be addressed in a new DOE technical standard." Maurice concluded this line of thought by conceding that although these formidable tasks could resolve the documentation issue, they would require an expenditure of resources that may or may not be justified by the safety benefit.

"The question then becomes," said Maurice, "what is the value of having a documented set of requirements

including technical standards, to work to?" His answer expressed a basic philosophy of technical standards: "The documentation of technical standards provides a measure of proof that applicable and appropriate requirements form the basis for effective environment, health and safety management. Requirements adhered to via the application of technical standards then establish the basis to perform the work called for by contract."

"My experience with standards has shown that while knowledge of technical standards is important, it is the *implementation* of documented standards that provides reasonable assurance of safe operation."

- Maurice Pitt

In his concluding statements to *The Standards Forum*, Maurice revealed some key elements of his personal technical standards philosophy: "My experience with standards has shown that while knowledge of technical standards is important, it is the *implementation* of documented standards

that provides reasonable assurance of safe operation. In addition, working to appropriate standards is presumed to be the best route to safe operation and should provide reasonable assurance that adequate protection of the public, workers and environment is maintained across the spectrum of facilities and activities in the DOE complex. The trick is to develop appropriate programs to identify and implement standards that are proven and effective in assuring and maintaining safety."



Standards On-line Access: A Win-Win DOE Partnership

(By Madelyn Wilson, OSTI)



The partnership between the Office of Nuclear Safety Policy and Standards

(EH-31) and the Office of Scientific and Technical Information (OSTI) in support of the Technical Standards Program (TSP) has proven to be successful. The success of this partnership is the cornerstone of OSTI's mission to provide leadership in leveraging the Department's unique scientific and technical information resources.

OSTI's customized products and services related to the TSP project include, but are not limited to, home page development and maintenance, document printing, distribution, scanning, and conversion of paper information into electronic format. The full-text document conversion initiative and improved timeliness of *The Standards Forum* and *Standards Actions* publications are accomplishments achieved through continuous re-engineering and process improvement.

The TSP Home Page, managed by OSTI, provides convenient World Wide Web access to full-text documents, monthly and quarterly publications, meeting announcements, information lists, and other important TSP information. In addition, OSTI converts electronic files and legacy documents to Hypertext Markup Language (HTML) and/or Portable Document Format (PDF) enhanced files. Electronic publishing capabilities extend to web page analysis, design, and development; hyperlink development; and the management and oversight of the World Wide Web server.

On-line search capabilities of the technical standards documents are provided via the Wide Area Information Server (WAIS) database. The WAIS server database (supplemented with hyperlinks) facilitates detailed and sophisticated search and retrieval of information across all TSP documents on the World Wide Web.

The Office of Scientific and Technical Information and the Office of Nuclear Safety Policy and Standards will continue their partnership of process improvement and technological enhancements to ensure the DOE Technical Standards community is provided current and timely standards information.

Analysis Underway ... OHSMS Standards (Continued from Page 1)

again into "mixed breakout groups" so that there could be an exchange of ideas in small working groups among all the different constituencies. Reports from the mixed breakout groups were presented in the concluding plenary session.

Included among the reasons given by participants who felt an international OHSMS standard should not be developed at all were: it would not improve worker health and safety; it would add cost without adding value; it could lead to a standard that is the lowest common denominator, that is, lower than U.S. actual practice; small and medium-sized companies want guidance—an ISO standard will not help them; current company internal programs are adequate; there is no compelling trade needed; such a standard would be an impediment to labor and management; and international consensus would be difficult to achieve.

Among the reasons cited by those who felt that an OHSMS international standard should not be developed at this time were: there is some uncertainty between the public and private sectors as to what the development of an occupational safety and health standard would entail; more experience is needed from ISO 9000 and ISO 14000 as well as an evaluation of their benefits; and a national consensus is needed before proceeding with an international standard.

A minority of participants were in favor of ISO developing an OHSMS standard. Among the reasons cited were: It would help the global safety and health environment; it would support the movement toward a global economy; and ISO is likely to proceed and the U.S. may lose out if not a participant. The majority of the workshop participants felt that the U.S. should take a leadership role in the development of an

OHSMS international standard if ISO were to proceed.

Questionnaires were provided to workshop attendees and to other stakeholders that could not participate in the workshop. The information obtained from the workshop and questionnaires is currently being reviewed by the IAC task group. The results will be consolidated into a report to present to the IAC, who will then review the study and make a determination of what should be the U.S. perspective.

"Once the Geneva workshop takes place, it will be the task of the ISO technical management board to review the outcome of the workshop and then decide whether the work should go forward," ANSI President and CEO Sergio Mazza told the workshop participants. "The rules for ISO essentially state that in order to proceed with a new technical committee, there must be a 2/3 majority of ISO member bodies voting in favor of proceeding with the new work item, and at least five countries must be willing to participate actively in the work," Mazza said.

Workshop Proceedings Available

The proceedings from the 1996 Technical Standards Program Workshop held in St. Louis on April 10-12, 1996, have been distributed to all attendees and the Technical Standards Managers. Anyone else desiring a copy may obtain one by contacting Madelyn Wilson, U.S. Department of Energy, OSTI, P.O. Box 62, Room 162, Oak Ridge, TN 37830; phone 423-576-8408;

Email madelyn.wilson@ccmail.osti.gov.

Meeting the Challenge of Change - the Key to Future Standards Success

(The following quotes from the Summer 1996 issue of the *ANSI Reporter* are used with permission.)

In an interview reported in the Summer 1996 issue of the *ANSI Reporter*, Lawrence L. Wills, American National Standards Institute (ANSI) Chairman of the Board, strongly emphasized the need for proactivity in standards development. With respect to government downsizing and its effects on private and public relationships, Wills stated: "We are seeing greater reliance by government on private sector programs and standards. This is certainly beneficial to government and to industry in that costs are reduced and processes simplified.

This is good for the taxpayer and the consumer." When queried about challenges facing the U.S. voluntary standards system, Wills noted: "The biggest challenge is to find ways to speed up or to compress the process of standards development. To fail to do so may lead to the collapse of the present system... we can no longer live with a standards development process that takes 24 to 30 months." Wills also highlighted the increasing role of electronic networking: "The Institute of Electrical and Electronics Engineers is developing an electronic-based standards development and distribution system. ANSI and NIST are jointly developing a National Standards Systems Network that will electronically link standards developers and users in the U.S. Wills also acknowledged the need for cooperation beyond domestic borders: ... more must be done. Without major change, the current system will be replaced by de facto and consortia-based standards groups, or industry-sector standards organizations that will evolve internationally. The changes must occur at all levels—nationally, regionally, and internationally. We must find ways for the system to accommodate standards development cycles of 6 months or less. The standards system must become less *process* dominated and must be driven by what the customer needs and wants."

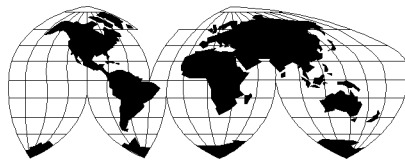
ISO 14000 Goes On-Line

ISO 14000 Integrated Solutions (IIS)[™] is a joint product of ANSI and the Global Environment & Technology Foundation. The goal of IIS[™] is to educate and train U.S. industry, government, and non-government organizations in the development of international environmental management standards, and to incorporate these groups into the development process. Coverage spans international as well as U.S. Technical Advisory Group, federal, state, and local activities to provide an in-depth look at the background, development, and eventual implementation of ISO 14000. A number of organizational elements have been set up within IIS[™], including Education & Training Services, Conferencing Services, IIS On-Line[™], and Publications.

IIS[™] is currently in the "Beta" stage of development (building of the system is in progress) and will be available for a short time at no charge at: <http://www.iso14000.org/>. Content-related questions about IIS[™] or ISO 14000 will be accepted at 703-750-6401.

Review of Standards for Conversion

The World of Standards



NEWS BRIEFS

Conversion of DOE technical standards to international and national non-government standards was discussed at the November 1995 meeting of the American National Standards Institute's Nuclear Standards Board (ANSI-NSB). The consensus was that the best way to accomplish the conversion process was to use the ANSI-NSB. An ad hoc committee was appointed to work that effort.

Meetings of the ad hoc committee were held in Germantown, Maryland on April 17, 1996, and July 16, 1996. The Technical Standards Program (TSP) standards project list was used as a basis for identifying conversion candidates and for determining which standards developing organization under the ANSI federation could be an appropriate sponsor. Four important factors were identified during the review:

- 1) an appropriate end user is identified,
- 2) it is applicable to DOE (nuclear safety) Category 1 and 2 facilities,
- 3) it involves technology transfer, and
- 4) the primary focus is on requirements to control nuclear risks.

The following ground rules were established during the committee meeting relative to the impact(s) of conversion:

- 1) Avoid forcing lower risk facilities to defend not meeting higher risk requirements.
- 2) Avoid applying new technologies without justification.
- 3) Standards should be compatible with requirements and practices of existing NRC licensed facilities.
- 4) Standards should be written prospectively, but with potential retrospective impact considered.
- 5) Standards should be based on the best current technology.

Forty-seven DOE technical standards projects were identified as candidates for conversion to non-government standards, and potential ANSI standards developing organizations for effecting the conversions were listed. ANSI is now working actively with DOE to identify viable conversion opportunities. If you have any comments or opinions on existing DOE technical standards that should be converted to voluntary standards, please contact Rocky Arnold, EH-31, 301-903-5773, Rocky.Arnold@hq.doe.gov.

(Continued on page 6)

News Briefs (Continued from Page 5)

TSMC Meeting

The next meeting of the Technical Standards Managers' Committee will be held on October 29-30, 1996, at the Embassy Suites hotel in Alexandria, Virginia. The hotel is conveniently located directly across from the King Street Metro station. A block of rooms has been reserved under "DOE Technical Standards", so meeting participants from outside the Washington, D.C. area should call the hotel 703-684-5900 and make their reservations as soon as possible.

The meeting agenda is being developed and will be distributed in the near future. We expect to focus attention on standards development and implementation issues, both site-specific and generic; please contact Marty Marchbanks, ORNL, 423-241-3658, mmf@ornl.gov, to get your issues on the agenda. All Technical Standards Managers or their designated alternates are encouraged to attend and be an active participant in the meeting discussions and breakout sessions.

1996 Editions of TSL-1 and TSL-4

The latest editions of DOE-TSL-1, *Department of Energy Standards Index*, and DOE-TSL-4, *Directory of DOE and Contractor Personnel Involved in Non-Government Standards Activities*, have been developed and are ready for publication. Copies of the documents are being distributed to the Technical Standards Managers and DOE libraries, and the information in both documents is being posted for viewing or printing under the TSP Home Page. If you would like to purchase copies of DOE-TSL-1 and DOE-TSL-4, please contact DOE's Office of Scientific and Technical Information at 423-576-8401.

Forty-Four (44) Additional Information Infrastructure Standards Needs Identified by IISP

The Information Infrastructure Standards Panel (IISP) recently finalized 44 additional Information Infrastructure Standards needs in the implementation of the Global Information Infrastructure (GII). The most recently identified standards needs (IISP Needs #42 - 85) focus on the Interface and Service areas of Application to Device, Network to Device, Application to Application, and Intelligent Transportation Requirements.

IISP has established a process for both identifying and reviewing standards needed to implement the GII. After a need for a standard is identified, it is submitted for review within IISP, and it is also submitted to a group of organizations who have volunteered to review the standards needs identified by IISP. Thirty standards and specifications development organizations have volunteered to participate in the IISP Needs Review Process, and are presently reviewing the IISP Needs in order to identify any existing

standards or standards projects that might fulfill all or part of any of the identified needs.

IISP has sought the broadest possible participation to take part in this process so that costly duplication of effort is avoided. Many of the standards needs identified by IISP originate from within an IISP Working Group. In addition, a number of organizations have submitted standards requirements to IISP for inclusion in the Needs Review Process. In particular, standards needs were recently submitted to IISP by the Intelligent Transportation Society (ITS) of America (IISP Needs #80 - 83), Human Factors and Ergonomics Society (HFES) (IISP Need # 84), and The SGML Centre (UK) (IISP Need #85).

Summaries and links to the full text of all of the standards needs identified by IISP can be found at:
<http://www.ansi.org/iisp/needlist.html>.

For additional information on the IISP Needs Review/ Submittal Process, please contact Peter Lefkin, ANSI (plefkin@ansi.org or 212-642-4979).

Sandia Hosts Metrology Workshop: Strategies for the Future

On August 8-9, 1996, Sandia National Laboratories in Albuquerque, New Mexico, hosted a workshop for metrology experts from across the nation, who met for the first time in a unique effort to identify and coordinate DOE metrology activities, and to establish a metrology support network. Brought together through the joint efforts of Ralph Johnson (Sandia Measurement Standards Program Office) and Bob Wayland (Sandia Technical Standards Program Office), the delegates were comprised of managers, associates, and representatives in the metrology arena plus personnel active in measurement standards and calibration of measurement and test equipment.

Delegates present for this first-time-ever workshop included representatives from Oak Ridge, Savannah River, the National Institute of Standards and Technology (NIST), U.S. DOE Environmental Measurements Laboratory, Allied Signal, Bechtel/Nevada, and Waste Isolation Pilot Plant Project. Guest speakers included Nancy Trahey-Bale, NIST Standard Reference Materials Deputy Chief; Sharrill Dittman, NIST Calibration Program Chief; and Frank Guenther, NIST Analytical Chemistry Division. A team of Sandia Technical Standards Program Office personnel, headed by Ken Hanks, organized, coordinated, and facilitated the workshop.

The goals of the workshop were to identify metrology needs within DOE and to form a committee that will spearhead DOE metrology efforts. During a series of breakout sessions designed to address the workshop's goals, the delegates successfully identified metrology issues common to their respective organizations. In addition, they focused on pooling metrology resources for more cost-efficient operations and for increasing the impact of DOE metrology

(Continued on Page 12)



Standards *Actions*

Documents Recently Published

The following DOE documents have recently been published:

- DOE-STD-1030-96, *Guide to Good Practices for Lockouts and Tagouts*, May 1996.

DOE employees and DOE contractors may obtain copies from the DOE Office of Scientific and Technical Information (OSTI), P.O. Box 62, Oak Ridge, Tennessee 37831; telephone 423-576-8401 or FAX 423-576-2865.

Subcontractors and the general public may obtain copies from the U.S. Department of Commerce, Technology Administration, National Technical Information Service, Springfield, Virginia 22161; telephone 703-487-4650 or FAX 703-321-8547.

The Technical Standards Program is sponsoring a project at the Office of Scientific and Technical Information (OSTI) to place *all* DOE technical standards (i.e., standards and handbooks) on the Internet. To date, 105 DOE technical standards have been placed on the Internet at the following address:

<http://apollo.osti.gov/html/techstds/techstds.html>.

The following DOE technical standards have recently been placed on the Internet:

- DOE-HDBK-1019/1-93, *DOE Fundamentals Handbook, Nuclear Physics and Reactor Theory*, Volume 1 of 2, January 1993.
- DOE-HDBK-1016/2-93, *DOE Fundamentals Handbook, Engineering Symbolology, Prints, and Drawings*, Volume 2 of 2, January 1993.
- DOE-HDBK-3010-94, *Airborne Release Fractions/Rates and Respirable Fractions for Nonreactor Nuclear Facilities, Volume I - Analysis of Experimental Data*, December 1994.

Non-Government Standards

American National Standards Institute

The American National Standards Institute (ANSI) publishes coordination activities of non-government standards (NGS)

biweekly in *ANSI Standards Action*. Please note that distribution of *ANSI Standards Action* is normally made only to individual members of ANSI or in group mailings to site members of ANSI. For information on site membership, ask your local ANSI contact. For information on individual or group ANSI membership, call Bethany Marks at 212-642-4948. For further information on distribution policies of ANSI publications, call the ANSI distribution manager at 212-642-4952.

Technical Standards Program Document Status as of 08/31/96

| In Conversion | In Preparation | Out for Comment | Published in Past 30 Days |
|---------------|----------------|-----------------|---------------------------|
| 23 | 72 | 20 | 1 |

Total in process = 92

Copies of *ANSI Standards Action* and ANSI-published documents may be obtained from ANSI, 11 West 42nd Street, New York, NY 10036 (212-642-4900, FAX 212-302-1286). Comments on listed draft standards may be submitted by contacting the standards developing organization for information.

The following listings are extracted from *ANSI Standards Action* and are representative of

NGS development activities that may be relevant to DOE operations. Refer to *ANSI Standards Action* for a complete listing of changes and new publications, standards-developing organizations, and additional information about submitting comments.

The following American National Standards are currently in coordination:

- ASHRAE 62, *Ventilation for Acceptable Indoor Air Quality* (revision of ANSI/ASHRAE 62-1989); comments due October 15, 1996.
- ASME AG-1a-1996, *Code on Nuclear Air and Gas Treatment* (supplement to ANSI/ASME AG-1-1994); comments due October 15, 1996.
- ASME PTC 46, *Overall Plant Performance* (new standard); comments due October 1, 1996.
- ASTM D92, *Test Method for Flash and Fire Points by Cleveland Open Cup* (revision of ANSI/ASTM D92-90); comments due October 1, 1996.
- ASTM D1356, *Terminology Relating to Sampling and Analysis of Atmospheres* (new standard); comments due October 1, 1996.

(Continued on page 8)

Standards Actions (Continued from page 7)

- ASTM D1704, *Test Method for Determining the Amount of Particulate Matter in the Atmosphere by Measurement of the Light Absorbance of a Filtered Sample* (new standard); comments due October 1, 1996.
- ASTM D3162, *Test Method for Carbon Monoxide in the Atmosphere (Continuous Measurement by Nondispersive Infrared Spectrometry)* (new standard); comments due October 1, 1996.
- ASTM D3172, *Practice for Proximate Analysis of Coal and Coke* (new standard); comments due October 15, 1996.
- ASTM D3176, *Practice for Ultimate Analysis of Coal and Coke* (new standard); comments due October 15, 1996.
- ASTM D3442, *Test Method for Gaseous Tritium Content of the Atmosphere* (new standard); comments due October 1, 1996.
- ASTM D3608, *Test Method for Nitrogen Oxides (Combined) Content in the Atmosphere by the Greiss-Saltzman Reaction* (new standard); comments due October 1, 1996.
- ASTM D3670, *Guide for Determination of Precision and Bias of Methods of Committee D-22* (new standard); comments due October 1, 1996.
- ASTM D3685, *Test Methods for Sampling and Determination of Particulate Matter in Stack Gases* (new standard); comments due October 1, 1996.
- ASTM D4480, *Test Method for Measuring Surface Wind by Means of Wind Vanes and Rotating Anemometers* (new standard); comments due October 1, 1996.
- ASTM D4490, *Practice for Measuring the Concentration of Toxic Gases or Vapors Using Detector Tubes* (new standard); comments due October 1, 1996.
- ASTM D4536, *Test Method for High-Volume Sampling for Solid Particulate Matter and Determination of Particulate Emissions* (new standard); comments due October 1, 1996.
- ASTM D5096, *Test Method for Determining the Performance of a Cup Anemometer or Propeller Anemometer* (new standard); comments due October 1, 1996.
- ASTM D5111, *Guide for Choosing Locations and Sampling Methods to Monitor Atmospheric Deposition at Non-Urban Locations* (new standard); comments due October 1, 1996.
- ASTM D5157, *Guide for Statistical Evaluation of Indoor Air Quality Models* (new standard); comments due October 1, 1996.
- ASTM D5280, *Practice for Evaluation of Performance Characteristics of Air Quality Measurement Methods with Linear Calibration Functions* (new standard); comments due October 1, 1996.
- ASTM D5366, *Test Method for Determining the Dynamic Performance of a Wind Vane* (new standard); comments due October 1, 1996.
- ASTM 5438, *Practice for Collection of Floor Dust for Chemical Analysis* (new standard); comments due October 1, 1996.
- ASTM D5527, *Practices for Measuring Surface Wind and Temperature by Acoustic Means* (new standard); comments due October 1, 1996.
- ASTM D5741, *Practice for Characterizing Surface Wind Using a Wind Vane and Rotating Anemometer* (new standard); comments due October 1, 1996.
- ASTM D5756, *Test Method for Microvacuum Sampling and Indirect Analysis of Dust by Transmission Electron Microscopy for Asbestosmass Concentration* (new standard); comments due October 1, 1996.
- ASTM D5791, *Guide for Using Probability Sampling Methods in Studies of Indoor Air Quality in Buildings* (new standard); comments due October 1, 1996.
- ASTM D5952, *Guide for Inspecting Water Systems for Legionellae and Investigating Possible Outbreaks of Legionellosis (Legionnaires' Disease or Pontiac Fever)* (new standard); comments due October 1, 1996.
- ASTM/ASQC/NSF/ISO DIS 14040, *Environmental Management - Life Cycle Assessment - Principles and Framework* (new standard); comments due October 15, 1996.
- NEMA MG-1, *Motors and Generators* (revision of ANSI/NEMA MG-1-1993); comments due October 1, 1996.
- NFPA 11-1997, *Low-Expansion Foam* (revision of ANSI/NFPA 11-1994); comments due October 11, 1996.
- NFPA 12A-1997, *Halon 1301 Fire Extinguishing Systems* (revision of ANSI/NFPA 12A-1992); comments due October 11, 1996.
- NFPA 204-1997, *Guide for Smoke and Heat Venting* (revision and redesignation of ANSI/NFPA 204M-1991); comments due October 11, 1996.
- NFPA 491-1997, *Hazardous Chemical Reactions* (revision of ANSI/NFPA 491M-1991); comments due October 11, 1996.
- NFPA 1500-1997, *Fire Department Occupational Safety and Health Program* (revision of ANSI/NFPA 1500-1992); comments due October 1, 1996.
- NFPA 1521-1997, *Fire Department Safety Officer* (revision of ANSI/NFPA 1521-1992); comments due October 11, 1996.
- NFPA 1981-1997, *Open-Circuit Self-Contained Breathing Apparatus for Fire Fighters* (revision of ANSI/NFPA 1981-1992); comments due October 11, 1996.

(Continued on page 9)

Standards Actions (Continued from page 8)

- NFPA 8501-1997, *Single Burner Boiler Operation* (revision of ANSI/NFPA 8501-1992); comments due October 11, 1996.
- NFPA 8503-1997, *Pulverized Fuel Systems* (revision of ANSI/NFPA 8503-1992); comments due October 11, 1996.
- UL 4, *Standard for Safety for Armored Cable* (revision of ANSI/UL 4-1996); comments due October 15, 1996.

The following newly published American National Standards are available from ANSI:

- ISO 9989: 1996, *Determination of uranium in uranium dioxide powder and pellets - Iron(II) sulfate reduction/potassium dichromate oxidation titrimetric method.*
- ISO 11960: 1996, *Petroleum and natural gas industries - Steel pipes for use as casing or tubing for wells.*

The following international standards are currently in coordination (comment due dates follow each entry):

- 31J/47/FDIS, *Draft IEC 79-14 (2nd edition): Electrical apparatus for explosive gas atmospheres - Part 14: Electrical installations in explosive gas atmospheres (other than mines)* - September 15, 1996.
- ISO/DIS 5725-5, *Accuracy (trueness and precision) of measurement methods and results - Part 5: Alternative methods for the determination of the precision of a standard measurement method* - October 11, 1996.
- ISO/DIS 11725, *Solid mineral fuels - Determination of nitrogen - Semi-micro gasification method* - October 11, 1996.
- ISO/DIS 12571, *Building materials - Determination of hygroscopic sorption curves* - October 11, 1996.
- prEN 416-1/prA1:1996, *Single burner gas-fired overhead radiant tube heaters for non-domestic use - Part 1: Safety* - November 20, 1996.
- prEN 11116, *Gas cylinders - 7E taper thread for connection of valves to gas cylinders - Specifications (ISO/DIS 11116:1996)* - October 27, 1996.
- prEN 12094-4, *Fixed fire fighting systems - Components for CO₂ systems - Part 4: Requirements and test methods for high pressure container valve assemblies and their actuators* - December 4, 1996.
- prEN 12456, *Cryogenic vessels - Pressure protection devices for vacuum insulated cryogenic vessels outer jackets* - November 13, 1996.
- prEN 12465, *Timber poles for overhead lines - Durability requirements* - December 4, 1996.
- prEN ISO 10439, *Centrifugal compressors for general refinery service in the petroleum and natural gas industries (ISO/DIS 10439: 1996)* - October 20, 1996.

American Society for Testing and Materials

Standards activities of the American Society for Testing and Materials (ASTM) are published monthly in *ASTM Standardization News*. Orders for subscriptions or single copies of *ASTM Standardization News* may be submitted to ASTM, Subscription Dept.-SN, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959. For information regarding ASTM membership, contact the Membership Services Department at 610-832-9692. ASTM publications may be ordered from the ASTM Customer Services Department at 610-832-9585 (FAX 610-832-9555). Comments on listed draft standards may be submitted by contacting the ASTM Standards Coordination Department at the above address. Questions may be addressed to the Technical Committee Operations Division at 610-832-9743 (FAX 610-832-9666). ASTM is developing a World Wide Web home page at the following URL: <http://www.astm.org>. The following listings are extracted from *ASTM Standardization News* and are representative of NGS development activities that may be relevant to DOE operations.

The following ASTM standards are currently in coordination (the due date for all items is September 10, 1996):

- New Standard, *Specification for Borated Dispersion Strengthened Copper Plate, Sheet, Strip, and Rolled Bar for Nuclear Application* (Ref. Z5886Z).
- New Standard, *Method of Test for the Thermal Performance of Building Assemblies by Means of a Hot Box Apparatus* (Ref. Z2856Z).
- New Standard, *Specification for Perpendicularly Oriented Mineral Fiber Roll and Sheet Thermal Insulation for Pipes and Tanks* (Ref. Z4394Z).
- New Standard, *Test Method for Determination of Bulk Density of Stockpiled Material Using Nuclear Backscatter Methods* (Ref. Z1997Z).
- New Standard, *Methods of Determining Airtightness of Buildings Using An Orifice Blower Door* (Ref. Z5659Z).
- New Standard, *Test Method for Measuring Solar Reflectance of Horizontal and Low-Sloped Surfaces in the Field* (Ref. Z5731Z).
- New Standard, *Practice for Use of the International System of Units (SI): the Modern Metric System* (Ref. Z5642Z).
- New Standard, *Practice for Accreditation Criteria to Assess Certification Programs for Environmental Professionals* (Ref. Z5983Z).
- Provisional, *Practice for Evaluating Quality Systems of Organizations Engaged in Conducting Facility and Hazard Assessments to Determine the Presence and Extent of Lead in Paint, Dust, Airborne Particulate, and Soil in Air* (Formerly PS 45-96).

(Continued on page 10)

Standards Actions (Continued from page 9)

The following newly published standards are available from ASTM:

- C 1334-96, *Specification for Uranium Oxides With a 235U Content of Less Than 5% for Dissolution Prior to Conversion to Nuclear-Grade Uranium Dioxide* (new standard).
- D 1743-94, *Test Method for Corrosion Preventive Properties of Lubricating Greases* (new standard).
- D 2795-95, *Method for Analysis of Coal and Coke Ash* (revised standard).
- D 4619-96, *Practice for the Inspection of Linings in Operating Flue Gas Desulfurization Systems* (revised standard).
- D 5664-95, *Test Method for Evaluating the Effects of Fire-Retardant Treatments and Elevated Temperatures on Strength Properties of Fire-Retardant Treated Lumber* (new standard).
- D 5881-95, *Test Method (Analytical Procedure) for Determining Transmissivity of Confined Nonleaky Aquifers by Critically Damped Well Response to Instantaneous Change in Head (Slug Test)* (new standard).
- D 5886-95, *Guide for the Selection of Test Methods to Determine the Rate of Fluid Permeation Through Geomembranes for Specific Applications* (new standard).
- D 5922-96, *Guide for Analysis of Spatial Variation in Geostatistical Site Investigations* (new standard).
- E 903-96a, *Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres* (revised standard).
- E 1678-96, *Test Method for Measuring Smoke Toxicity for Use in Fire Hazard Analyses* (revised standard).
- E 1799-96, *Practice for Visual Inspection of Photovoltaic Modules* (new standard).
- E 1802-96, *Test Methods for Wet Insulation Integrity Testing of Photovoltaic Modules* (new standard).

American National Standards Projects Initiated

The following is a list of proposed new American National Standards or revisions to existing American National Standards submitted to ANSI by accredited standards developers. DOE employees or contractors interested in participating in these activities should contact the appropriate standards developing organization. DOE-TSL-4 lists the DOE representatives on NGS committees. If no DOE representative is listed, contact the TSPO for information on participating in NGS activities.

ASTM

Office: 100 Barr Harbor Drive
West Conshohocken, PA 19428-2959
Contact: Peggy Cicchitti

- ASTM E05.13, *Practice for Conduction of Full Scale Oxygen Consumption Calorimetry Fire Test* (new standard).

Contact: Stephen Mawn

- ASTM Z6330Z, *Guide for Sample Selection of Architectural Component Debris Waste from a Renovation of Lead Abatement Project for Toxic Characteristic Leaching Procedure (TCLP) or Waste Extraction Test (WET) Testing* (new standard).

Institute of Electrical and Electronic Engineers

Office: 445 Hoes Lane, P. O. Box 1331
Piscataway, NJ 08855-1331

Contact: Kathy Doty

- IEEE 1466, *Recommended Practice for the Safe Use of Electromagnetic Energy Sources, Equipment and Systems Operating between 3 kHz and 300 GHz* (new standard).
- IEEE C57.12.24, *Standard Requirements for Underground-Type Three-Phase Distribution Transformers - 2500 kVA and Smaller; High Voltage: 34,500 GrdY/19 920 Volts and Below; Low Voltage: 480 Volts and Below* (revision).
- IEEE C57.135, *Guide for the Application, Specification and Testing of Phase Shifting Transformers* (new standard).

Underwriters Laboratories, Inc.

Office: 12 Laboratory Drive
Research Triangle Park, NC 27709-3995

Contact: Deborah Prince

- UL 260, *Standard for Safety for Dry Pipe and Deluge Valves for Fire-Protection Service* (new standard).

Comments or Questions

If you have any questions or comments, please contact Rick Serbu (EH-31), Manager, DOE Technical Standards Program Office (TSPO), phone 301-903-2856, FAX 301-903-6172; Email Richard.Serbu@hq.doe.gov. Questions or comments may also be referred to Don Spellman, c/o Performance Assurance Project Office, Oak Ridge National Laboratory, P.O. Box 2009, Oak Ridge, Tennessee 37831-8065; phone 423-574-7891; Email spellmandj@ornl.gov.

The TSPO would like to be kept informed of the status of technical standards that are being prepared or coordinated for DOE. Please provide this information to the TSPO by phone at 423-574-7886 or by Email at lj8@ornl.gov.

Upcoming Meetings

September 29 - October 3, 1996

Probabilistic Safety Assessment

Olympia Park Hotel, Park City, Utah.

Theme: *Moving Toward Risk-Based Regulation*

Methodology development and applications will be addressed in panels, paper sessions, and software exhibits.

For more information, contact N. Siu, FAX 208-526-2930; Email nsc@inel.gov.

October 14-15, 1996

1996 Standards Engineering Society (SES) Annual Conference

Washington National Airport Hilton, Arlington, Virginia.

Theme: *Standards: Solutions for Success*

Subjects: standards development, the future of standards developing, standards for productivity and profitability, and consortiums and traditional standards development.

For more information, contact Donald Kear, Executive Director, SES, at 513-258-1955.

October 15-16, 1996

World Standards Day

Theme: The U.S. celebration of World Standards Day focuses on "services" to consumers and the business community.

October 15, 1996: Awards Reception and Dinner, Renaissance Arlington Hotel, Arlington, Virginia.

October 16, 1996: Marriott at Metro Center, Washington, D.C., ANSI/*Business Week Magazine* symposium on standardization of international trade. The Honorable Paul Kaminski, under secretary for acquisition and technology, DoD, will present the keynote address at the Reception scheduled for that evening at the Marriott.

For more information, contact Michael F. Hoynes, ANSI, 212-642-4950, Email mhoynes@ansi.org or URL http://www.ansi.org/ws_day.html.

12:00 Noon - 3:00 pm, October 24, 1996

ISO 14000 Satellite Conference

Sponsored by ASTM, the University of Missouri - Columbia, ANSI, and GETF.

Joe Cascio, chairman of the U.S. Technical Advisory Group, will be the major speaker. Other speakers will



include the presidents of ASTM and ANSI, and representatives of the EPA and NIST. For information on the site nearest you or how your organization could host your own site, call 800-358-9821.

November 10-14, 1996

1996 American Nuclear Society / European Nuclear Society International Meeting

Sheraton Washington Hotel, Washington, D.C.

Theme: *The Global Benefits of Nuclear Technology: Improving the Quality of Life for the Present and Future Generations*

The Nuclear Technology Expo will be held November 10-12 during the meeting. Three embedded topical meetings of international interest will also be included.

For more information, contact General Chair Donald Hoffman, Excel Services Corporation, 11921 Rockville Pike, Suite 100, Rockville, MD 20852, 301-984-4400, FAX 301-984-7600, or the ANS Meetings Department, 555 N. Kensington Avenue, La Grange Park, IL 60526, 708-579-8258, FAX 708-352-6464.

November 17-22, 1996

1996 International Mechanical Engineering Congress & Exposition

Atlanta Hilton, Atlanta, Georgia

Subjects: engineering methods and models, emerging technologies, standards-related subjects. Highlights include Facility Safety - New Standards, Advances in Information Storage, and Industrial Ergonomics.

For more information, contact the ASME Meetings Department/MS 7H, 345 East 47th Street, New York, NY 10017; 800-843-2763, FAX 212-705-7856; Email infocentral@asme.org; Internet <http://www.asme.org/index.html>.

November 19-21, 1996

20th Annual TRADE Conference

Theme: *Looking to the Future*

For personnel from all DOE-managed/operated facilities, Operations Offices, and Headquarters. Subjects will include Cost Efficiency, Environmental Management, ISO 14000, "Work Smart" Standards, Radiation Protection, and much more!

For more information call Denise Hawkins, ORISE, 423-576-3316, Email hawkinsd@orau.gov.

News Briefs (Continued from Page 6)

efforts in the national and international arenas. The session ended with the selection of an interim steering committee empowered to actively pursue the necessary logistics for developing a formal, DOE-wide committee and supporting structure to spearhead DOE metrology efforts. The resulting organization will be a partnership with NIST and the DOE Technical Standards Program Office.

All the participants agreed that the workshop instilled an enthusiasm for metrology networking and a welcome spirit of cooperation, and they were unanimous in their praise for the Sandia Measurement Standards Program Office and Technical Standards Program Office for their efforts in producing a meaningful and productive workshop.

The delegates agreed to meet again in February 1997, to consider and act upon issues presented by the steering committee, including a formal charter to ratify the DOE-wide committee and a suggested organizational structure to address the metrology issues and concerns identified at the workshop. For more information about this new organization and how you can become involved, contact Bob Wayland at jrwayla@sandia.gov, or call him at 505-271-7917.

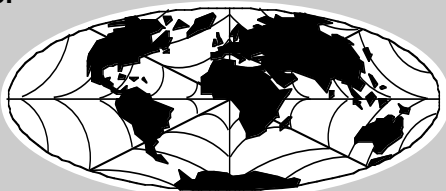
"Work Smart" Standards

The pilot projects on the "Necessary and Sufficient" (N&S) standards process have been completed, and work is underway to expand implementation of N&S within the DOE community. With the expanded implementation of the process comes a change in terminology; "N&S" is now referred to as "Work Smart" standards. Be sure to consult the Department Standards Committee home page (URL: <http://www.dsc.doe.gov/index.html>) for the latest information on "Work Smart" standards.



Be an early bird!

The Standards Forum and Standards Actions are on the World Wide Web at least a week ahead of hardcopy distribution. We are a part of the Technical Standards Program (TSP) Home Page, which features lists of Technical Standards, lists of personnel involved in TSP and non-government standards activities, hot links to other technical standards organizations, and much more!



You can catch us at:

<http://apollo.osti.gov/html/techstds/techstds.html>

LESSONS



LEARNED

Too Much Cache?

If you haven't cleared your cache recently, you may not be accessing the latest version of an Internet file. When you select a link on the Internet, the information is transferred to your computer for viewing. It resides in your browser's cache or

temporary folder. The browser can retrieve files more quickly from the cache folder than from the Internet location. Pressing the reload button tells your browser to compare dates on the local and Internet files and access the more recent one; however, this does not always work. To prevent your browser from reconnecting to the file saved on your hard drive, you must clear the cache folder.

To clear the cache folder in Netscape Navigator 2.0, select "Options" from the Menu bar. Then select "Network Preferences." On the cache index tab, select the buttons for clearing both the memory cache and the disk cache.

In Microsoft Internet Explorer 2.0, select "Options" from the View menu, then select "Advanced." Press the "Empty" button on the cache index tab.

In Mosaic 2.0, select "Options", then "Preferences." Press the "Clear Memory Cache" button on the cache index tab. To clear the disk cache, select "Advanced Disk Cache Manager" and press "Clear All."

The Standards

Forum

Published By

Editor Marty Marchbanks

Oak Ridge National Laboratory (ORNL) publishes *The Standards Forum* quarterly for the DOE Technical Standards Program. Questions or comments may be referred to Rick Serbu, EH-31, 301-903-2856; Email:

Richard.Serbu@hq.doe.gov. If you have any comments on DOE standards projects, please call Don Spellman, ORNL, 423-574-7891; Email: **spellmandj@ornl.gov**.

If you have any comments on *The Standards Forum*, or you would like to have your name added to (or removed from) the mailing list for this publication, or you need to make an address change, please notify Marty Marchbanks, ORNL, 423-241-3658; FAX: 423-574-0382; Email: **mmf@ornl.gov**.